

BRANCH PREDICTOR USING BRANCH PREDICTION ACCURACY HISTORY

Abstract of the Disclosure

Sub A20
Sub A19

A branch predictor outputs either a predicted conditional branch or an inverted predicted conditional branch as a final branch prediction outcome, in response to a predicted accuracy history signal based on an accuracy history bit. According to the accuracy history bit, it is determined whether the branch prediction outcome of the branch predictor is correct. If the predicted conditional branch is correct, the branch predictor outputs the predicted conditional branch, and if the predicted conditional branch is not correct, the branch predictor outputs the inverted predicted conditional branch, in response to the predicted accuracy history signal. For performing this process, the branch prediction appends an accuracy history table and a multiplexer to a conventional branch predictor, so that the branch prediction according to the present invention can reduce the misprediction with relatively simple circuitry and low hardware cost.

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